National Institute of Environmental Health Sciences

Malaria in Turkey: Successful control and strategies for achieving elimination

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Abstract:

Turkey is located in the middle of Asia, Africa and Europe, close to Caucasia, Balkans and Middle East in subtropical climate zone. Malaria has been known since the early ages of human history and it was one of the leading diseases in Anatolian history, as well. Today, chloroquine-sensitive Plasmodium vivax is the only agent of autochthonous malaria cases in Turkey. The other Plasmodium species identified are isolated from imported cases of malaria. The most common vector of malaria in Turkey is Anopheles sacharovi followed by An. superpictus, An. maculipennis and An. subalpinus. In 2009, pre-elimination stage of Malaria Program was started due to dramatic decline in the number of malaria cases in Turkey (Total, 84; 38 autochthonous cases only in 26 foci in south-eastern Anatolia, and 46 imported cases; incidence: 0.1/100,000). As there were no detected cases of new autochthonous malaria in the first 8 months of 2010, elimination stage was started. The role of the persistent policies and successful applications of the Ministry of Health, such as the strict control of the patients using anti-malarial drugs especially chloroquine, avoidance of resistant insecticides, facilitation of access to patients via Health Transformation Program (HTP), establishment of close contact with the patients' families, and improvement of reporting and surveillance system, was essential. In addition, improvement maintained in the motivations and professional rights of malaria workers, as well in the coordination of field studies and maintenance of a decline or termination in vector-to-person transmission were all achieved with the insistent policies of the Ministry of Health. Other factors that probably contributed to elimination studies include lessening of military operations in south-eastern Anatolia and the lowering of malaria cases in neighbouring countries in recent years. Free access to health services concerning malaria is still successfully conducted throughout the country. (C) 2011 Elsevier B.V. All rights reserved.

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Resource Description

Early Warning System: ☑

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure : ☑

weather or climate related pathway by which climate change affects health

Unspecified Exposure

Geographic Feature: ☑

resource focuses on specific type of geography

Other Geographical Feature

Other Geographical Feature : subtropical

Geographic Location: ☑

resource focuses on specific location

Non-United States

Non-United States: Europe

European Region/Country: European Country

Other European Country : Turkey

Health Impact: ☑

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Vectorborne Disease

Vectorborne Disease: Mosquito-borne Disease

Mosquito-borne Disease: Malaria

Intervention: ☑

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation: ☑

mitigation or adaptation strategy is a focus of resource

Adaptation

Resource Type: ☑

format or standard characteristic of resource

Review

Timescale: ☑

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: ☑

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content